

THREE NEW ALEURODIDAE FROM MEXICO.

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The following three species, which are more than usually interesting, were collected by Prof. C. H. T. Townsend, and sent to me by Dr. L. O. Howard. In the genus *Aleurodes*, the best characters are derived from the pupa; and, in fact, the adults of very many species are still unknown. In *Aleurodicus*, on the other hand, we get our specific characters from the imago, and the pupae are all much alike. That this sort of difference should obtain between two so nearly allied genera, is a matter of much interest.

Aleurodicus iridescentis, n. sp.—Agrees with *A. asarumis* in having some blackish coloration at the forking of the wing-vein, but differs in having the body and legs a deep chrome yellow, and the eyes not divided. Length of anterior wing 2 mm.; wings noticeably iridescent; a blackish line on the costa. Pupae along the midrib of the leaf, as in *Aleurodicus pulvinata* (Maskell, as *Aleurodes*), surrounded by abundant cottony secretion. Pupae dark grey or plumbeous, varying to brownish, structural characters as usual in the genus. Vasiform orifice semicircular; operculum very broad, broadly truncate at end. Four large round orifices on each side of the abdomen, some distance from the margin, but not nearly so large as Maskell figures for *pulvinata*; four very much smaller orifices in the caudal region, laterad of the vasiform orifice, the two hindmost nearer to each other than are the anterior ones; two of the large orifices at the cephalic end, and also four small ones as in *pulvinata*, but they are very minute.

Hab.—Ocean beach between El Faro and San Pedro, Tabasco, Mexico, June 12, 1897, on "Jicaco," a bush with large leaves growing on the sand flats. (Townsend.) Div. Ent. 7824.

Aleurodes mirabilis, n. sp.—Pupa (late larva?) $1\frac{1}{2}$ mm. long, after boiling transparent and colorless, except some brown stains in the thoracic region. Mouth-parts distinct and well-formed; rostral loop short; legs present, very stout, with small hooked claws. Form oblong, quite elongate, with a border densely dotted with round glands; anteriorly this border is very narrow, and at the extreme hind end it ceases, but all along the sides it is extremely broad. The cephalic portion of the insect, the hind end, and the lateral margins within the border, are also densely dotted with glands. Abdomen distinctly segmented, but the segmentation does not extend to the border. On each side of the abdomen are four curious large glandular processes, of the type of those in *A. holmesii* Mask. Lingua trowel-shaped, extending considerably beyond the broad operculum; at each side of the base of the lingua is an angular prominence. The general type of these parts is that of *A. pulvinata* Mask., but while the lingua is equally long, it is in our insect gently bowed out at the sides; and the two bristles at the end of the lingua in *mirabilis* are not nearly so long as in *pulvinata*.

Externally, the insect appears as a large mass (5 to 10 mm. long) of snow white cottony tufts, irregularly disposed, from the midst of which spring many very long curved white threads. The pupa itself is entirely covered.

Hab.—Boca del Usumacinta, Tabasco, Mexico, July 8, 1897, on "Laurel," which is not our plant of that name (Townsend.) Div. Ent., 7984. This remarkable insect resembles *Aleurodicus* several respects; when all its stages are known it will probably be referred to a new genus.

Aleurodes vinsonioides, n. sp.—Pupa of an intense black, even after boiling. At one

end, far apart from each other, are two small round orifices. Margin minutely beaded with brown. The pupa has the usual oval form, and is hardly over imm. long, minutely transversely ribbed down the middle of the back; with twelve broad ribbon-like rays of glassy secretion, not much shorter than itself. These rays are of a bright lemon yellow, except at their ends, which are white. Larval skin attached to dorsum of pupa.

Hab.— Frontera, Tabasco, Mexico, on leaves of a tree having small white flowers. (Townsend.) Div. Ent. 7669. Allied to *A. stellata*. The insect looks like a coccid of the genus *Vinsonia*.

Mesilla Park, N. M.

April 7, 1898.

PACKARD'S NEW MANUAL.

DR. PACKARD'S Guide to the study of insects has passed through many editions and has been for a long period the most successful and serviceable manual the American entomologist has had; the classification of insects was its foundation. The learned author now comes forward with a Text book,* constructed on a totally different basis; there is scarcely a word of classification in it, but only the facts forming the basis of classification: the external and internal structure, the embryology, and the metamorphic changes; that is, it is morphologic instead of taxonomic, to serve the present needs. It is the book for the day and is sure to command attention and come into general use. Numerous special bibliographies scattered throughout the book will prove of great service; they should, however, have been listed in the table of contents or separately, and the index is not so full as one could wish. There

* A text-book of entomology, including the anatomy, physiology, embryology and metamorphoses of insects, for use in agricultural and technical schools and colleges, as well as by the working entomologist; by A. S. Packard. 17 + 729 pp., 654 figs. New York. The Macmillan Co. 1898. \$4.50.

is too little room in our small journal for the fuller notice it deserves, but we strongly advise its purchase by every entomologist, as a marvellous storehouse of facts, where the latest researches find a place.

JOSEPH ALBERT LINTNER.

A DISPATCH from Rome, Italy, announcing the death of the state entomologist of New York, was published in the newspapers on the very day we received his twelfth Report on the insects of New York, a volume of more than a hundred and fifty pages, and, like all of his papers, filled with the proof of painstaking conscientious labor. Let us hope his successor will prove as diligent and faithful.

PROCEEDINGS OF THE CLUB.

8 APRIL, 1898. The 201st meeting of the club was held at 156 Brattle St., the President in the chair; Mr. J. W. Folsom was chosen secretary pro tem.

Mr. S. H. Scudder exhibited the North American species of Scudderiae and briefly summarized the result of his recent studies upon that group. Thirteen species are known, of which one necessitates a new genus, *Platylyra*. All the eleven species of Scudderiae are closely similar to each other, with a few striking exceptions, and fall into four groups, based especially upon the structure of the male genitalia, of which drawings were shown. The species *septentrionalis* and *forcipata* are remarkably peculiar in respect to their accessory genital organs. Five species occur in New England, of which *furcata* is found across the continent, and *texasensis* ranges as far west as Utah.

Mr. J. W. Folsom said that nothing had hitherto been published concerning the *Collembola* of Japan, but showed specimens and figures of three new species from Tokyo.